Child Development: Research and Policy

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by Hannes Schwandt and Valentine Duque

The economic literature on child development, emerging over the last 20 years, has made two important contributions to the study of human inequality: (1) Child development is a major determinant of individual's life-long health and productivity and (2), particularly important are the in-utero period (the so called 'fetal origins' hypothesis) and the first years of life in laying the foundations for future success. Healthy children grow up to become healthy and productive adults, and this trajectory starts already in womb (Barker 1998; Almond, Currie, Duque 2017; Heckman 2007).

Despite the increasing prominence of the child development literature in economics and social science, public discussions and policy debates have so far paid little attention to these important insights. Take for example the current debate on health care reform. The discussion is mainly focused on the Affordable Care Act (ACA) and on the services that adults and the elderly would lose if it were repealed. But some of the measures that are debated would also roll back pre-ACA Medicaid expansions affecting the health care coverage of millions of children – currently, the ACA provides coverage for 40% of children and for half of all births in the U.S.

This apparent disconnect between academic research on child development and the policy debate does not seem to be explained by the lack of evidence on specific policies. For instance, child development studies show that the introduction of Medicaid in the 1960s as well as the program's expansions during

the 1980s and the 1990s led to significant improvements in children's health (Currie and Gruber 1996; Goodman-Bacon forthcoming). Deaths among infants and children dropped dramatically, especially among disadvantaged groups and in poor areas (Currie and Schwandt 2016), and in young adulthood, cohorts with more health care access enjoyed better labor market outcomes (Brown, Kowalski, and Lurie 2015; Goodman-Bacon 2017). If the broader public were more aware of the insights from this literature, there could be a better understanding that much more is currently at stake than just the repeal of the ACA.

But evidence on striking policy impacts running through child development is not limited to Medicaid. Other studies have shown that social programs targeted at children in the form of nutritional supplementation (e.g., Foods Stamps, WIC), maternity leave, child care access, preschool education, or income transfers (e.g., Earned Income Tax Credit) can significantly boost children's health and cognitive potential (Hoynes, Schanzenbach, and Almond, 2016; Almond, Hoynes, Schwazenbach, 2011; Hoynes, Miller, and Simon, 2015; Dahl and Lochner, 2012; Ludwig and Miller 2007; Elango et al. 2016), and some of these gains could be transmitted across generations (Aizer et al. 2016; East et al. 2017). And even interventions not directly targeted at children but related to improving environmental conditions such as policies that reduce pollution levels (Isen, Rossin-Slater, and Walker 2017) or those aimed at lowering infectious disease burden (Bhalotra and Venkataramani 2013, Schwandt 2017), have been found to imply positive long-term gains in human capital.

How can we make sure that the public debate and the design of new policies is more actively informed by these findings from the child development literature? First, by developing "sufficient statistics" on key elasticities that summarize the effects of interventions on particular outcomes of interest (e.g., wages), researchers could facilitate policy makers' role in taking advantage of the myriad of evidence in the literature (Almond, Currie, and Duque 2017). Second, providing cost-benefit evaluations of interventions would allow policy makers to arguably compare effectiveness across specific programs. In many cases this would require researchers to investigate additional aspects of the program such as costs of implementation, the interest rate at which estimated effects should be discounted, etc., and often this information is easily not available. Given this limitation, studies that focus on interventions that are quite cheap and easy to implement, are of particular interest to policy makers.

On example of this is the case of vitamin D supplementation during pregnancy as discussed in Wernefeld, Slusky, and Zeckhauser (2016) – featured in this volume of the American Journal of Health Economics. The authors showed that doubling the amount of in-utero exposure to sunlight reduces the incidence of child's asthma — a condition that imposes staggering physical and financial costs across the world– by a sizeable effect of 10-20%. Finally, in order to allow policy makers to prioritize resources to specific populations and needs it is crucial to examine heterogeneities in the effects of policies and how their impacts interact with other factors of child and youth development.

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